

IN THE CLAIMS

1. (Currently amended) A method for providing collateral information for inclusion with an information stream, comprising steps of:

examining the information stream to recognize a presence of events that occur in the information stream, wherein said events are derived from the information stream based on one or more predetermined taxonomies, wherein the step of examining the information stream comprises the steps of automatically extracting text from the information stream, segmenting the text into sentences and a step of operating on the sentences to identify topics that correspond to topic taxonomies of the predetermined taxonomies and the presence of names of entities;

assembling a list comprised of an identified topic having a start time and an end time, as well as any named entities that occur between the start time and the end time;

assembling a query object comprised of named entities that occur between the start time and the end time of the identified topic;

searching at least one database to identify a first set of stored documents that correspond to the topic;

identifying a subset of the first set of documents that contain the named entities;

identifying a second set of documents that correspond to words found in the text;

scoring the returned documents based on a plurality of criteria and ranking the documents based on their scores;

automatically generating database queries from said derived events; and

analyzing results of said database queries so as to rank and select said results to be inserted into the information stream as information that is collateral to said derived events.

2. Canceled

3. (Currently amended) A method as in claim 2~~1~~, wherein the plurality of criteria comprise a score derived from a free text search of the database using text that is automatically extracted from the information stream, on a number of named entities appearing in the text and in the database query results, and on a taxonomy path score, where the taxonomy path score represents an amount of relatedness between a taxonomy-related information element found in the text and a tree of the predetermined taxonomies.

4-6. (Canceled)

7. (Currently amended) A method as in claim 5~~1~~, wherein the step of automatically extracting text from the information stream comprises a step of operating a voice recognition system.

8. (Currently amended) A method as in claim 5~~1~~, wherein the step of automatically extracting text from the information stream comprises a step of extracting closed caption text.

9. (Currently amended) A method as in claim 51, wherein the step of automatically extracting text from the information stream comprises a step of operating a character recognition system.

10. (Currently amended) A method as in claim 51, wherein the step of automatically extracting text from the information stream comprises a step of also generating text that is descriptive of a number of human faces that are present in an image conveyed by the information stream.

11. (Canceled)

12. (Currently amended) A method for providing collateral information for multiplexing with an information stream, comprising steps of:

converting the information stream into text;

analyzing the text to identify information elements based on one or more predetermined taxonomies;

automatically generating queries from the information elements for searching at least one database;

extracting data from database search results that is relevant to the information stream, wherein the step of extracting comprises a step of ranking extracted document information based on a score derived from a free text search of a document database using the text, on a number of named entities extracted from the text that are found in the documents, and on a taxonomy path score, where the taxonomy path score represents an amount of relatedness between a taxonomy-related information element identified in the text and a tree of the predetermined taxonomies; and

multiplexing the data into the information stream for presentation at a destination of the information stream.

13. (Canceled)

14. (Canceled)

15. (Previously presented) A method as in claim 12, wherein the queries are generated based on information elements that correspond to a list of information elements identifying topics in the text being analyzed, where the topics correspond to topic taxonomies of the predetermined taxonomies.

16. (Previously presented) A method as in claim 12, wherein the step of analyzing the text comprises steps of segmenting the text into sentences and a step of operating on the sentences to identify topics that correspond to topic taxonomies of the predetermined taxonomies, and wherein the step of automatically generating queries operates on identified topics.

17. (Canceled)

18. (Canceled)

19. (Currently amended) A system for providing collateral information for inclusion with an information stream, said system operating in real time or substantially real time and comprising:

a subsystem for examining the information stream to recognize a presence of events that occur in the information stream, wherein said events are derived from the information stream based on one or more predetermined taxonomies;

a subsystem, having an input coupled to an output of said examination subsystem, for automatically generating database queries from said derived events;

a database for receiving said database queries; and

a subsystem, having an input coupled to an output of said database, for analyzing results of said database queries so as to rank and select said results to be inserted into the information stream as information that is collateral to said derived eventsas in claim 18, wherein the analyzing subsystem employs ranking criteria comprised of a score derived from a free text search of the database using text that is automatically extracted from the information stream, on a number of named entities appearing in the text and in the database query results, and on a taxonomy path score, where the taxonomy path score represents an amount of relatedness between a taxonomy-related information element found in the text and a tree of the predetermined taxonomies, and wherein the query generation subsystem generates queries based on information corresponding to a list that identifies topics in the text that is automatically extracted from the information stream, where the topics correspond to elements of the taxonomy tree.

20. (Previously presented) A system as in claim 19, wherein said examining subsystem comprises at least one unit for automatically extracting text from the information stream, a unit for segmenting the text into sentences and at least one unit for operating on the sentences to identify topics that correspond to topic taxonomies of the predetermined taxonomies, wherein said query generation subsystem automatically generates database queries based at least in part on identified topics.

21. (Original) A system as in claim 20, wherein said text extracting unit comprises at least one of a voice recognition system, a system for extracting closed caption text, and a character recognition system.

22. (Original) A system as in claim 20, wherein said examining subsystem comprises a unit for generating text that is descriptive of a number of human faces that are present in an image conveyed by the information stream.

23. (Currently amended) A system for providing collateral information for inclusion with an information stream, said system operating in real time or substantially real time and comprising:

a subsystem for examining the information stream to recognize a presence of events that occur in the information stream, wherein said events are derived from the information stream based on one or more predetermined taxonomies, wherein said examining subsystem comprises at least one unit for automatically extracting text from the information stream, a unit for segmenting the text into sentences and at least one unit for operating on the sentences to identify topics that correspond to topic taxonomies of the predetermined taxonomies;

a subsystem, having an input coupled to an output of said examination subsystem, for automatically generating database queries from said derived events, wherein said query generation subsystem automatically generates database queries based at least in part on identified topics;

a database for receiving said database queries;

a subsystem, having an input coupled to an output of said database, for analyzing results of said database queries so as to rank and select said results to

be inserted into the information stream as information that is collateral to said derived events; and as in claim 20, and further comprising

a unit for operating on the sentences to identify the presence of names of entities, and further comprising a unit for assembling a list comprised of an identified topic having a start time and an end time, as well as any named entities that occur between the start time and the end time, and where the query generation subsystem assembles a query object comprised of named entities that occur between the start time and the end time of the identified topic for searching said database to identify a first set of stored documents that correspond to the topic, a subset of the first set of documents that contain the named entities, a second set of documents that correspond to words found in the text; and where said analyzing subsystem scores the returned documents based on a plurality of criteria and ranks the documents based on their scores.

24-32. (Canceled)

33. (Currently amended) A computer readable media having recorded thereon a program for providing collateral information for inclusion with an information stream, the program comprising instructions for:

examining the information stream to recognize a presence of events that occur in the information stream, wherein the events are derived from the information stream based on one or more predetermined taxonomies, wherein the instruction for examining the information stream comprises instructions for automatically extracting text from the information stream, for segmenting the text into sentences and for operating on the sentences to identify topics that correspond to topic taxonomies of the predetermined taxonomies and the presence of names of entities;

assembling a list comprised of an identified topic having a start time and an end time, as well as any named entities that occur between the start time and the end time;

assembling a query object comprised of named entities that occur between the start time and the end time of the identified topic;

searching at least one database to identify a first set of stored documents that correspond to the topic;

identifying a subset of the first set of documents that contain the named entities;

identifying a second set of documents that correspond to words found in the text;

scoring the returned documents based on a plurality of criteria and ranking the documents based on their scores;~~for~~

automatically generating database queries from said derived events; and
~~for~~

analyzing results of said database queries ~~results~~ so as to rank and select ~~database query~~said results to be inserted into the information stream as ~~collateral information~~ that is collateral to said derived events.